IST 400
Advanced Web Design
Fall 2014

Instructor: Jeffrey Snyder
E-mail: jeffs@sidearmsports.com
Location: Hinds Hall 027
Time: Tues/Thurs 2:00-3:20
Office Hours: By Appointment Only

COURSE DESCRIPTION

This course will introduce students to emerging web technologies in HTML5 and CSS3, and to use jQuery to create robust, high quality front end web interfaces. Although still under development, HTML5 and CSS3 are the next generation for front end web development and cutting edge web design. This course is intended for those familiar with HTML and CSS, but an expert level of understanding is not required. Additional work is required of graduate students.

Learning Outcomes:

- Learn how to create common page layouts, using best practices to ensure cross browser and cross platform compatibility and accessibility.
- Learn new features introduced in HTML5, specifically structural, video and form elements.
- Learn new styling capabilities introduced in CSS3, including shadows, gradients, rounded corners, animations and transitions.
- Learn how to use jQuery to select DOM elements, handle events and create animations.

BLACKBOARD

Syracuse University’s Blackboard system will used throughout the semester to submit assignments. You can access Blackboard at http://blackboard.syr.edu, using your NetID and password.

GRADING & POLICIES

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<tr>
<td>Class attendance and participation</td>
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<td>Weekly Lab Assignments</td>
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<td>Midterm Exam</td>
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*Graduate students will be required to be present their final project.
**Late assignments will not be accepted.
DESCRIPTION OF COURSE REQUIREMENTS

Class Attendance & Participation (10% of total grade)

All students are expected to attend every class. Also, participation in class will be determined as being prepared to discuss and answer questions about any reading assignments.

Weekly Lab Assignments (40% of total grade)

The majority of the grade for this course will be based on the timely completion of weekly lab assignments. Each Thursday, students will begin working on a lab assignment based on applying the material covered in the previous class. **Lab assignments will be due the following Thursday by 2:00PM!** Office hours are available by appointment and I will make all arrangements possible to provide assistance to any students struggling to complete these assignments on time.

Midterm Exam (20% of total grade)

There will be a midterm exam covering all material from the first half of this semester. This course is not meant for students to memorize hundreds and thousands of different HTML and CSS properties and attributes. Students are encouraged to use readily available online resources, like w3schools.com. This midterm will be based more on applying an understanding of the material covered in class through the first half of the semester.

Final Project (30% of total grade)

The final project will involve creating a front-end web site covering all material covered in class throughout the semester. The web site will be a static, front-end interface only, meaning there is no expectation for students to use any database or PHP/ASP.Net coding. As we near the end of the semester, I will provide more details on this project, including a rubric and checklist of all items required to be included in the web site. The web site will be relatively small, consisting of only four pages. It will be graded primarily based on its completion of required items and the quality of HTML/CSS programming (By the end of the semester, writing quality code should be second nature!).

To provide added interest in this project, I will ask all students to create a site based on their own personal interests or needs. For example, if you or a family member is an artist or photographer, the site you create could be used to profile that person and their artwork (i.e. including a custom photo gallery and contact form, etc.). Another good idea is to create a site to host your resume and a description of yourself for potential employers. Of course, if you have trouble thinking of any ideas of your own, I will provide you an idea and other materials needed to create your site. Start thinking of ideas early! – It will help to have a few ideas in mind before you’re asked to begin the project.

*Graduate students only* will be required to prepare a 10 minute presentation discussing their final project. This presentation will be given during the course’s scheduled final exam time slot. The presentation will cover an explanation into the thought process behind the development of the site and the design features included. More details on this presentation will be given along with the final project details/rubric.

After the course is completed, if any students would like assistance on making their sites live on the web, please contact me and I can help walk you through this.
COURSE CALENDAR

The course calendar is subject to change; this is meant as more of a rough outline of topics we will cover.

PHASE ONE: The Basics [Weeks 1-3]

In the first four weeks of this course, we will be diving right into HTML5, primarily focusing on changes in semantics and structure compared to its predecessor. Since HTML and CSS go hand in hand, we will also be using this time to review basic CSS – including block vs. inline elements, float, positioning and specificity. By the end of the first four weeks of class, you will be able to create and layout a basic HTML5 web page.

PHASE TWO: CSS3 [Weeks 4-7]

During this phase of the course, we will be getting into some of the advanced styling techniques available in CSS3. We will be expanding upon the basic site we created in the first few weeks by adding box/text shadows, gradients, rounded corners, backgrounds, animations and transitions. Also, we will learn some new pseudo-classes available such as :nth-child and :nth-of-type selectors.

PHASE THREE: jQuery [Weeks 8-11]

To begin the second half of the semester, we will learn the most powerful and widely used Javascript library in use today, jQuery. Some of the topics we will learn are DOM element selection and manipulation based on CSS selectors, event handling, and effects and animations. We will also learn to extend the capabilities of our sites by implementing jQuery UI, custom jQuery plugins and using AJAX to dynamically load JSON data to our pages.

PHASE FOUR: Responsive Design [Weeks 12-13]

Depending on the amount of class time available, we will spend as much time as we can covering responsive design. Responsive design is based on web pages adapting to the viewing device (smartphone, tablet, desktop, etc) by using media queries and fluid grids to create the most optimal viewing experience. Responsive web design is a more than just a current trend; it is a necessary skill for any web developer to have.
ACADEMIC INTEGRITY
The academic community of Syracuse University and of the School of Information Studies requires the highest standards of professional ethics and personal integrity from all members of the community. Violations of these standards are violations of a mutual obligation characterized by trust, honesty, and personal honor. As a community, we commit ourselves to standards of academic conduct, impose sanctions against those who violate these standards, and keep appropriate records of violations. The academic integrity statement can be found at: http://supolicies.syr.edu/ethics/acad_integrity.htm.

Due to the unique nature of web development and the use of developer tools to debug/inspect websites, ensuring academic integrity and ethics for this course can be challenging. Students are encouraged to use resources online to help them in completing assignments; however, plagiarism will not be allowed. Copying of code found online or from other students, with trivial modifications, will be defined as plagiarism. If a student is suspected of plagiarism, they will be asked to explain the intricacies of their solution and any techniques or principles used to generate that solution. In the case of plagiarism, no credit will be given for the assignment in question.

DISABILITIES
If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), http://disabilityservices.syr.edu, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

OWNERSHIP OF STUDENT WORK
This course may use course participation and documents created by students for educational purposes. In compliance with the Federal Family Educational Rights and Privacy Act, works in all media produced by students as part of their course participation at Syracuse University may be used for educational purposes, provided that the course syllabus makes clear that such use may occur. It is understood that registration for and continued enrollment in a course where such use of student works is announced constitutes permission by the student. After such a course has been completed, any further use of student works will meet one of the following conditions: (1) the work will be rendered anonymous through the removal of all personal identification of the work’s creator/originator(s); or (2) the creator/originator(s)’ written permission will be secured. As generally accepted practice, honors theses, graduate theses, graduate research projects, dissertations, or other exit projects submitted in partial fulfillment of degree requirements are placed in the library, University Archives, or academic departments for public reference.

RELIGIOUS OBSERVANCES POLICY
SU’s religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm, recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice/Student Services/Enrollment/My Religious Observances from the first day of class until the end of the second week of class.